

INVERTERS

S6-EH2P(5-8)K02-SV-YD-L

Hybrid inverter · Split-phase · 5 – 8 kW · 4 models


5 – 8 kW

RATED POWER

Split-phase

PHASE

2

MPPT TRACKERS

95.4 %

MAX. EFFICIENCY

Parameter	Unit	S6-EH2P5K02-SV-YD-L	S6-EH2P6K02-SV-YD-L	S6-EH2P7.5K02-SV-YD-L	S6-EH2P8K02-SV-YD-L
PV input					
Max. PV input power	W	10000	12000	16000	
Max. usable PV input power	W	8000	9600	12800	
Max. PV input voltage	V	500			
Rated PV input voltage	V	330			
MPPT voltage range	V	90 – 435			
Start-up voltage	V	90			
Max. input current per MPPT	A	21	42		
Max. short-circuit current per MPPT	A	24	48		
Number of MPPT trackers		2			
Max. input current per string	A	21			
Max. number of PV input strings		2	3	4	
AC output					
Rated output power	W	5000	6000	7500	8000
Max. apparent power	VA	5500	6600	7500	8800
Rated AC voltage	V	240			
Rated AC output current	A	20.8	25	31.3	33.3
Phase		Split-phase			
Rated AC frequency	Hz	50/60			
Total harmonic distortion (THDi)	%	<3			
Power factor		> 0.99 (0.8 leading to 0.8 lagging)			
Backup output power	W	5000	6000	7500	8000
Peak (surge) power	W	10000	12000	15000	16000
Generator input		Yes			

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Max. parallel units		6			
Grid voltage configurations		L+N+PE / 2L+PE, 220 V; L1/L2/N(PE), 120 (L-N) / 240 (L1-L2) VAC; L1/L2/N(PE), 127 (L-N) / 220 (L1-L2) VAC			
Rated grid output current at 220 V	A	22.7	27.3	34.1	36.4
Max. grid input power	W	7700	8800	11000	
Grid input voltage range	V	187 – 253			
Max. grid input current	A	35	40	50	
Backup rated output voltage		L1/L2/N(PE), 127 V / 220 V; 120 (L-N) / 240 (L1-L2) VAC; 127 (L-N) / 220 (L1-L2) VAC			
Backup rated output frequency	Hz	50/60			
Backup rated output current (at 240 V / 220 V)	A	20.8 / 22.7	25 / 27.3	31.3 / 34.1	33.3 / 36.4
Max. bypass current	A	35	40	50	
Backup THDv	%	<3			
On/off-grid switching time		<10 ms			
Generator max. input power	W	5000	6000	7500	8000
Generator rated input current (at 240 V / 220 V)	A	20.8 / 22.7	25 / 27.3	31.3 / 34.1	33.3 / 36.4
Battery					
Battery type		Lithium or lead-acid			
Battery voltage range	V	40 – 60			
Max. charge current	A	112	135	190	
Max. discharge current	A	112	135	190	
Number of battery ports / BMS ports		1 / 1			
Battery communication		CAN / RS485			
Efficiency					
Max. efficiency	%	95.4			
European efficiency	%	94.3			
Battery charging efficiency	%	95.0			
Battery discharging efficiency	%	93.7			
Protection					
Protection functions		Surge (lightning) protection; AC output overcurrent protection; Insulation resistance protection; Residual current (RCD) detection; Integrated PV switch; DC reverse polarity protection; DC arc fault protection; Anti-islanding protection			
Protection class / overvoltage category		Class I / OVC II (PV and battery ports), OVC III (grid, off-grid and generator ports)			
General data					
Dimensions (W x H x D)	mm	390 × 620 × 237			
Weight	kg	28.8			
Ingress protection (IP rating)		IP66			
Operating temperature range	°C	–25 – 60			

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Relative humidity	%	0 – 100			
Max. operating altitude	m	4000			
Cooling		Smart redundant air cooling			
Noise level	dB	<55			
Topology		Non-isolated (PV), isolated (battery)			
Self-consumption	W	<20			
Max. single-phase load capability		50% of rated power			
PV port		MC4 quick-connect plug			
Battery port		Screw terminal			
AC port		Screw terminal			
Communication					
Display		7-inch LCD display, Bluetooth + app			
Communication interfaces		Wi-Fi; LAN; Bluetooth; CAN-BMS; CAN-Parallel x 2; RS485-Meter; RS485; DRM; DI; DO x 2; 4G (optional)			
Certifications					
Certifications and standards		IEC/EN 61000-6-1/2/3/4; IEC/EN 62109-1; IEC/EN 62109-2; UL 1741; UL 1699B; FCC			
Grid codes		Inmetro140; IEEE 1547			

Specifications are subject to change without notice. Values are typical at 25 °C unless stated.

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